FULL SPECTRUM DOMINANCE

MOBILE COMM FOCUSES PEOPLE, EQUIPMENT WHERE THEY'RE NEEDED MOST

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From *the* Top

LANGLEY AIR FORCE BASE, Va. — As we look ahead into the not so distant future, we will see our ability to support the warfighter expand exponentially, enabling us to continue to transform the way the Air Force maintains full spectrum dominance.

Our ability to do so will come from our support of several successful programs.

SATELLITE CONNECTIONS: For instance, our modernization of legacy satellite terminals while fielding highly capable commercial tri-band satellite terminals, has quadrupled the bandwidth available to the warfighter. In addition, this enhanced satellite capability allows us to provide the C2 connectivity required for capabilities such as remote UAV split operations and dissemination of intelligence, surveillance and reconnaissance products.

"We're getting to the fight faster, with a smaller footprint, providing more capability to the warfighter directly impacting the course of battle. We provide real-time ISR video and imagery information to the warfighter, support for Web-based systems and allow time-sensitive sharing of critical data ... and these effects have occurred at a rapid pace, more in the last four years than in the past 20 years combined."

This summer, we will introduce the Quad-band Dual-Hub SATCOM Terminal, which will reduce SATCOM airlift requirements by 30 percent while increasing our SATCOM capability ten-fold.

GLOBAL BROADCAST SERVICE: Since its fielding in 2001, we've used the Global Broadcast Service extensively in the Global War on Terrorism. GBS is a 'big pipe' (23.5 Mbps), receive-only terminal that delivers vast amounts of information, such as Predator video and intelligence imagery, traditionally carried over other classified networks. **During Operation Iraqi Freedom, GBS capabilities reduced SIPRNET traffic by almost 30 percent.** Future improvements will migrate the system from an Asyncronous Transfer Mode to Internet Protocol-based architecture, which will allow dynamic bandwidth allocation. The results of these improvements will make the system more efficient and reduce its size from seven to four transit cases—cutting half its weight.

These "traditional" communications capabilities are not the limit of our advancements.

VOICE COMMUNICATIONS: Using the Fighter Aircraft Command and Control Enhancement pod, we've integrated commercial iridium satellite service with an air combat maneuvering instrumentation pod. The FACE pod provides voice communications to the cockpit from anywhere in the world. Two prototype pods are in use right now, and within a few months, we will deploy a total of 20 pods to the Central and Northern Commands' areas of responsibility for direct support to the warfighter.

LANDING SYSTEMS: We are also taking steps toward increasing the capabilities of our Deployable Air Traffic Control and Landing Systems. Recently, the first major technical refresh to the Air Force's 30 year-old TPN-19 DATCALS successfully passed acceptance testing and flight check, which will improve systems maintainability and reliability as well as replace high failure/non-supportable assemblies and reduce power consumption.

For the future of DATCALS, the Mobile Approach Control System will replace our aging radar fleets. **MACS will not only reduce airlift requirements (from seven C-130s to three), but will also increase reliability and maintainability.** MACS also promises the potential to integrate multiple radar sensors allowing greater control of the operational airspace. Currently scheduled to begin developmental/operational testing this month, MACS will provide safe and reliable

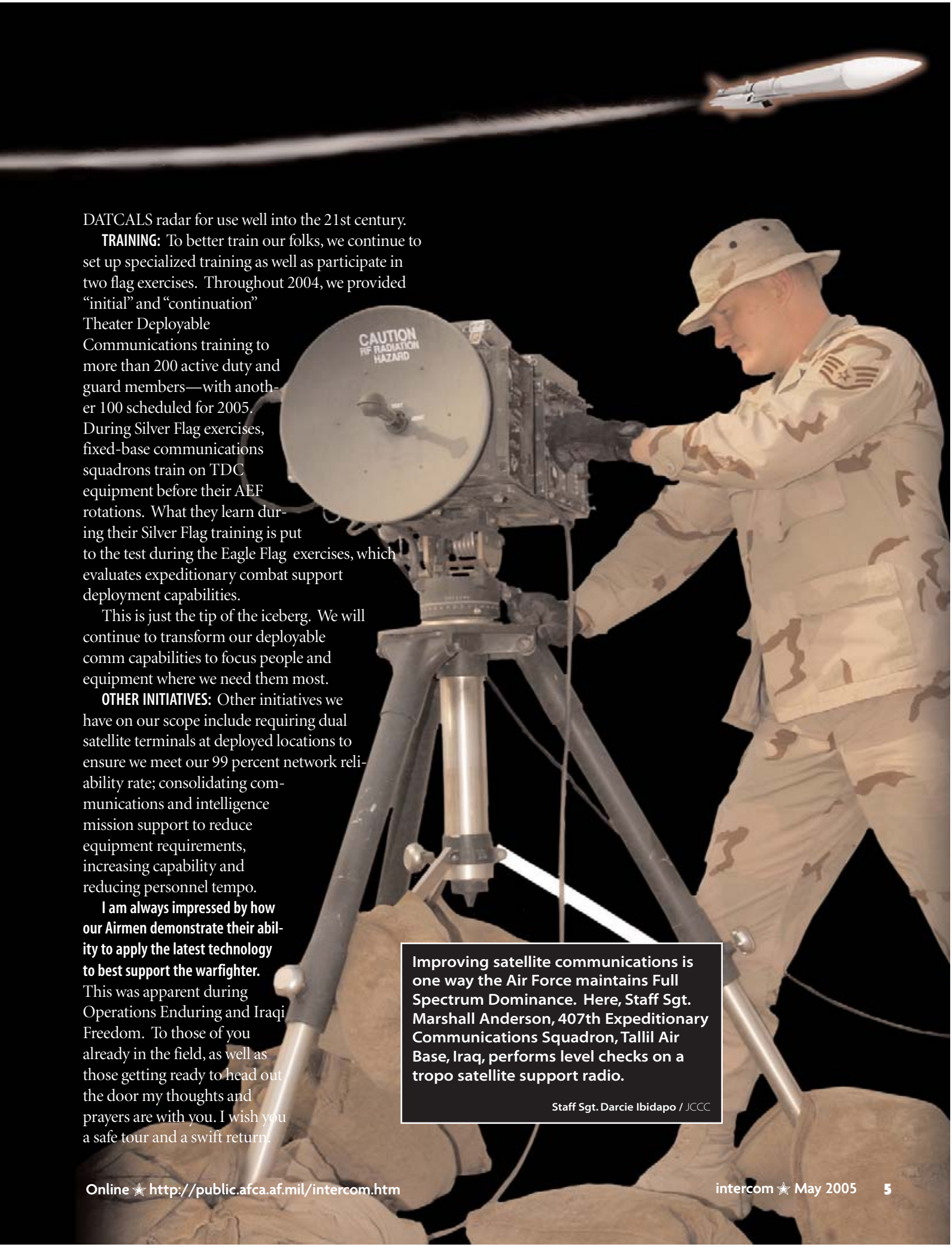
DATCALS radar for use well into the 21st century.

TRAINING: To better train our folks, we continue to set up specialized training as well as participate in two flag exercises. Throughout 2004, we provided "initial" and "continuation" Theater Deployable Communications training to more than 200 active duty and guard members—with another 100 scheduled for 2005. During Silver Flag exercises, fixed-base communications squadrons train on TDC equipment before their AEF rotations. What they learn during their Silver Flag training is put to the test during the Eagle Flag exercises, which evaluates expeditionary combat support deployment capabilities.

This is just the tip of the iceberg. We will continue to transform our deployable comm capabilities to focus people and equipment where we need them most.

OTHER INITIATIVES: Other initiatives we have on our scope include requiring dual satellite terminals at deployed locations to ensure we meet our 99 percent network reliability rate; consolidating communications and intelligence mission support to reduce equipment requirements, increasing capability and reducing personnel tempo.

I am always impressed by how our Airmen demonstrate their ability to apply the latest technology to best support the warfighter. This was apparent during Operations Enduring and Iraqi Freedom. To those of you already in the field, as well as those getting ready to head out the door my thoughts and prayers are with you. I wish you a safe tour and a swift return.



Improving satellite communications is one way the Air Force maintains Full Spectrum Dominance. Here, Staff Sgt. Marshall Anderson, 407th Expeditionary Communications Squadron, Tallil Air Base, Iraq, performs level checks on a tropo satellite support radio.

Staff Sgt. Darcie Ibidapo / JCCC